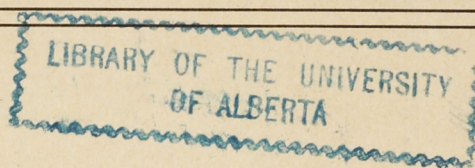


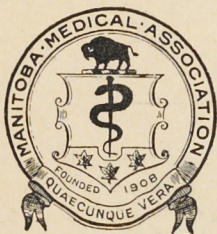
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**STACKS**



# The Manitoba Medical Association Review

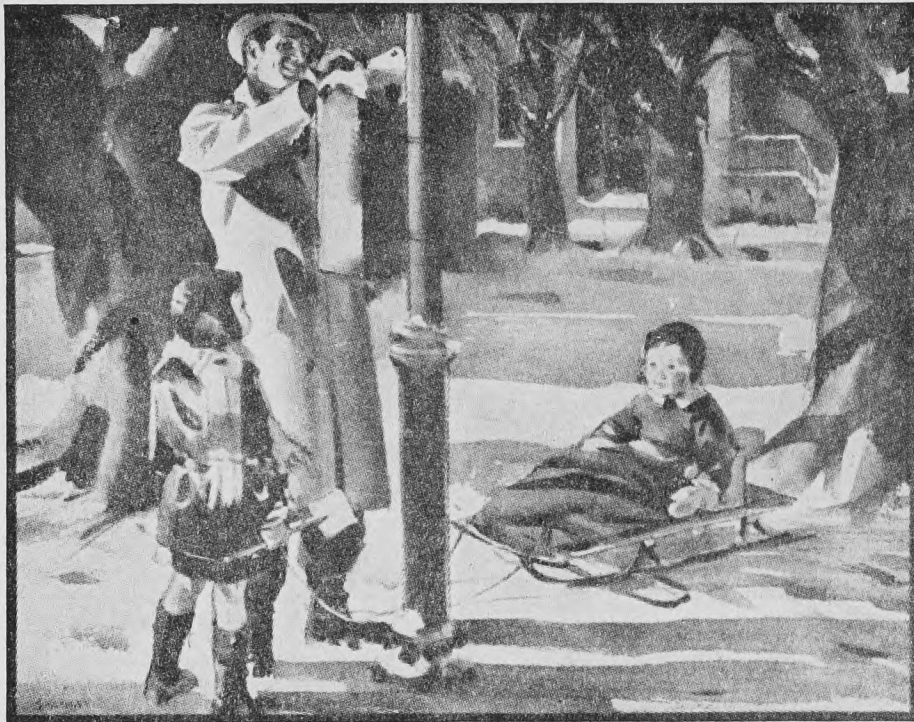


IN AFFILIATION WITH  
THE CANADIAN MEDICAL ASSOCIATION  
THE BRITISH MEDICAL ASSOCIATION

APRIL  
1934  
Vol. XIV., No. 4



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H \_\_\_\_\_ G \_\_\_\_\_

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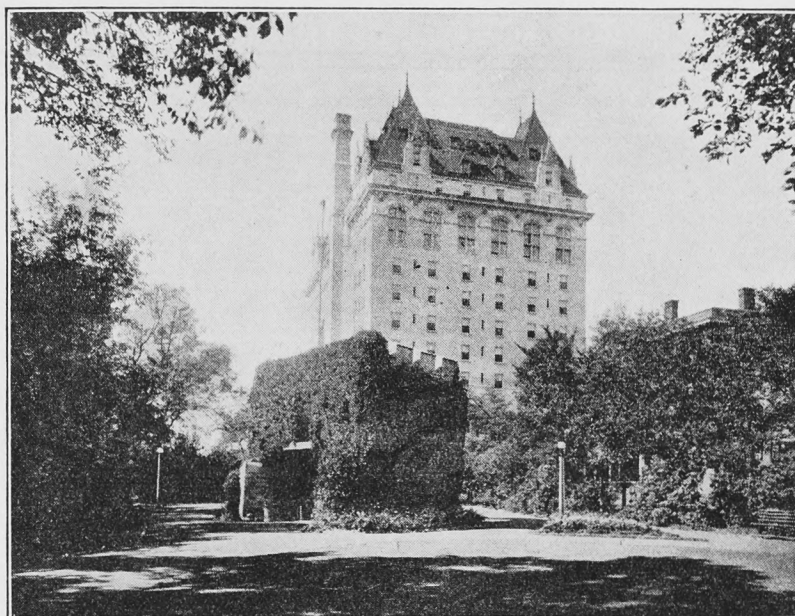
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# The Manitoba Medical Association Review

## Clinical Section

### \*Acute Intussusception in Children —Diagnosis and Treatment

By

J. D. McEACHERN, M.D. (Man.)

*Lecturer in Surgery, University of Manitoba*

*Surgeon to the Winnipeg Children's Hospital*

*Surgeon to the Misericordia Hospital, Winnipeg*

Intussusception is by far the commonest form of intestinal obstruction in children. It is produced by the invagination of one portion of the bowel into another. This invagination almost always takes place in a decending manner. A variety of reasons have been given to explain its occurrence, such as reversed peristalsis, a long mesentry, etc. The most plausible explanation is that it is due to a swelling of the lymphoid tissue about the ileo-cæcal valve, causing the valve to project into the cæcum until it is grasped as a foreign body and carried along the lumen of the gut.

#### Four Types Are Recognized:

##### 1. Ileo-Cæcal.

This is the common type forming more than 75% of the total number. The ileo-cæcal valve is the head of the entering portion and the invagination proceeds at the expence of the colon.

##### 2. Ileo-Colic.

This form begins as an enteric intussusception usually a few inches from the ileo-cæcal valve. It passes through the ileo-cæcal valve and the invagination proceeds at the expence of the ileum. This type occurs in about 20% of cases.

##### 3. Enteric.

This is rare apart from its association with the ileo-colic type as referred to above and usually occurs as a result of a tumor in the bowel wall or a swollen Peyer's patch.

##### 4. Colic.

This type is also rare and is formed by the invagination of colon into colon.

#### Pathology.

The pathological changes that occur in the intestine are mainly due to interference with its blood supply by constriction of the mesentry. At first the pressure effects the veins producing con-

gestion. As the pressure increases the arterial supply is effected, so the process goes on from oedema to extravasation and in neglected cases to necrosis and gangrene. Bacteria may make their way through the wall of the damaged bowel setting up a peritonitis.

#### Diagnostic Characteristics:

1. *Age.* Occurs in the first two years of life. Commonest between the third and eighth month.
2. *Sex.* Occurs much more frequently in boys.
3. Crampy pains in the abdomen.
4. Vomiting. [tum.]
5. Passage of blood and mucus from the rec-
6. Tumor.

In the typical case the onset is sudden and the pain severe. The child shows a marked pallor which is of diagnostic value. After the spasm of pain is over the child rests quietly and does not wish to be disturbed. The second attack of pain follows and vomiting occurs. In from four to twelve hours the child passes blood and mucus (red currant jelly) in the stool. The tumor is felt in the transverse colon or the left loin. It may be overlooked in the region of the splenic flexure.

#### Cases Showing Unusual Signs and Symptoms:

In some cases blood in the stool appears late in the course of the disease apparently due to the fact that the mesentry is not constricted to a marked degree. While the pain is usually so severe that the child screams during the attack it may be so slight as to attract very little attention from the mother. There is a chronic form in which the obstruction of the intestine is only partial and which may go on for weeks.

#### Diagnosis:

The diagnosis of intussusception in the typical case is easy. The age of the patient (usually a well nourished boy about six months of age) the sudden onset with spasmodic abdominal pain followed by vomiting; the passage of bloody mucus and the palpation of the abdominal tumor will leave no doubt in the mind of the diagnostician regarding the nature of the condition present. The bloody mucus in the rectum may be discovered only on rectal examination when the finger comes away blood stained. If abdominal examination is difficult on account of lack

\* Published by arrangement with the Faculty of Medicine, University of Manitoba.

of relaxation an anesthetic should be given when the tumor may be readily palpated. In doubtful cases the x-ray is of value, an opaque enema is given and the filling of the colon watched under the fluoroscope. The enema in cases of intussusception will often be arrested in the transverse colon. At the sight of the intussusception the shadow will frequently be seen to widen, with linear streaks of bismuth running at right angles to the long axis of the colon. This has been described as the coiled wire effect and is quite characteristic.

#### Differential Diagnosis:

The condition with which intussusception is most frequently confused is acute ileo-colitis. These two conditions have much in common. They are both frequently preceded by diarrhoea and vomiting and accompanied by the passage of blood and mucus from the bowel with tenesmus. Differentiation rests on the fact that in intussusception intestinal obstruction is present. In intussusception bile is not present in the blood and mucus on the baby's napkins after the first few motions while in ileo-colitis it is always present. The onset in ileo-colitis is likely to be more gradual than in intussusception. Intussusception has been mistaken for prolapse of the rectum when the bowel protrudes from the anus, this however, should offer no difficulty in differentiation. Henoch's or abdominal purpura may be accompanied by abdominal pain, bloody stools and a tumor in the left iliac fossa. It usually occurs in children from five to six years of age while intussusception is rare after two years. The tumor is fixed and is due to hemorrhage into the walls of the colon, intestinal obstruction is not present. There may be ecchymosis in other places—especially around the joints of the extremities.

#### Prognosis:

The prognosis depends on the reducibility of the tumor and on the length of time that the obstruction has been present. Early cases do well. If the intussusception cannot be reduced or the bowel is gangrenous necessitating resection, the mortality is practically one hundred per cent. Valuable time should not be wasted in attempts at reduction by the use of enemata or air injections.

#### Treatment:

The treatment is operative.

A paramedian incision is generally used, the reduction should be done as quickly and as gently as possible. The first part of the reduction can be carried out inside the abdomen bringing the bowel through the incision only when the last and most difficult part is reached. Reduction is accomplished by a milking action exerted on the receiving portion over the apex of the entering portion. It is said to be dangerous to pull on the entering loop. This danger has been greatly exaggerated. It is often a use-

ful manoeuvre. If reduction is difficult it is a very good plan to wrap a warm towel or abdominal pad about the tumor and with the palms of the hand make equal pressure around it, squeezing the mass for considerable time firmly. This will often quite effectually reduce the oedema and facilitate reduction. If the peritoneal coat of the colon is torn during reduction it should be carefully sutured before the abdomen is closed. Suturing of the terminal ileum to the colon distal to the ileo-cæcal valve and other operative procedures have been advised to prevent recurrence but are not to be recommended.

If reduction is impossible the case is almost hopeless. Resection with anastomosis is almost invariably fatal. Bringing the tumor out on the abdominal wall with enterostomy and later resection offers increased chance of recovery when this can be done. Wrapping the tumor with omentum and leaving it in situ with enterostomy can be tried in desperate cases to tide them over with the idea of resection and anastomosis later.

The administration of intravenous glucose is an essential part of the after treatment.

The mortality from intussusception is still very high, due to the fact that cases come late for operation. Like other forms of intestinal obstruction, early diagnosis and immediate operation offers the best hope of recovery.

## Treatment of Pulmonary Tuberculosis

*A summary of the important measures*

By

E. L. ROSS, M.D. (Man.)

*Assistant Medical Superintendent  
Manitoba Sanatorium, Ninette, Man.*

Tuberculosis has two phases—the childhood and the adult, as much unlike clinically as two distinct diseases. The childhood, or first infection disease, is caused by the first large enough dose of tubercle bacilli the child receives. Adult age may be reached without infection and then the same type of lesion may develop, but it is much more common in childhood. The lesion is fairly characteristic, usually benign, seldom produces symptoms or physical signs, and cannot be diagnosed correctly without the x-ray or the tuberculin test.

Treatment at this primary stage consists in removing the child from the source of infection (usually a member of the household, often parent or grand-parent) regulated rest and wholesome food. The lesion almost invariably clears. As a matter of fact, most of these children, as film after film made on travelling clinics shows, get better without any special treatment. A node of calcification, indicating a healed primary lesion remains situated anywhere in the lung field usually just beneath the pleura. Tracheal and bronchial glands involved secondarily usually become



calcified. Generalized, miliary or meningeal tuberculosis may develop, but this is exceptional.

This first encounter with the tubercle bacillus renders the tissues allergic or sensitive to subsequent infection. Reinfection then, if large enough, results in the adult, or dangerous kind of tuberculosis, the phase we are mainly concerned about in treatment.

Pulmonary tuberculosis is curable usually if discovered early. Fever, cough, bacilli in sputum, loss of weight, fatigue, and physical signs mean advanced disease and nearly always cavitation in the lung. That is, they mean secondary pyogenic infection superadded to the tubercle bacilli.

How can early lesions be discovered if they do not cause symptoms? By searching among those we know have had a special chance of developing the adult disease; that is, among those we know to have been exposed to infection. These child contacts may be followed for years with x-ray films without disease manifesting itself, and yet during adolescence, when the vigil is liable to slacken, active tuberculosis is most likely to develop.

One of the most useful functions then of a Sanatorium is the isolation of active and infective cases. In Manitoba in 1932 there were 413 deaths from tuberculosis. (This includes treaty Indians and others of Indian race. The death rate of the white population is very markedly decreasing). Leaving out the Indian deaths, 67% of the white people died in institutions. This isolation during the most infective stage of their disease undoubtedly saved hundreds of children, and hundreds of adults also, from gross infection.

The great cure for tuberculosis is rest. Rest in bed, regulated routine, wholesome diet, fresh air and sunshine remain the big principles. Tuberculosis is a disease of the whole body with local manifestations in the lung, or kidney, or pleura, or bone and joint. Rest in bed limits energy expenditure to the minimum, limits the movements of diseased lungs, while it also increases resistance and the natural healing powers of the body.

Sun and mercury quartz lamps are useful adjuncts in treatment and are of special value in non-pulmonary tuberculosis. The same could be said of tuberculin. The treatment of foci of infection and of non-tuberculous complications is very essential in the general management of tuberculous cases also, but cannot here be dealt with.

Collapse therapy in a way is simply a local application of the general principle of rest. Artificial pneumothorax has been used in the treatment of pulmonary tuberculosis for nearly fifty years, but only since the advent of the x-ray, and especially during the last fifteen years, has its worth been fittingly and indeed increasingly recognized. Today it takes its place along with general rest as the most important therapeutic measure. A broken arm is splinted. A tuber-

culous knee is ankylosed or immobilized. A tuberculous spine is splinted by plaster shells or bone graft to allow healing. In the same way a splint of air around a diseased lung will compress and immobilize it. If the parietal and visceral pleurae are not adherent as the result of pleurisy, a free pleural space is found and the lung gradually collapsed by allowing air to enter the pleural cavity. If no adhesions exist the diseased portion collapses and the healthier part of the lung remains expanded and a "selective" collapse is secured. But the fact remains that pleurisy and adhesions are common and mischievous complications.

The ideal case for pneumothorax is one in which disease is confined to one lung. However, bilateral involvement is not by any means a contraindication. The lung with most involvement may be collapsed and usually with the relief of toxemia and decreased symptoms resulting from closure of cavities in a bad lung, the other lung will improve. Bilateral simultaneous pneumothorax can also be employed and will be very effective if the collapse of each lung is selective. In the Manitoba Sanatorium at Ninette 1051 patients have had pneumothorax, and during the past four years over 20,000 initial fills and refills have been given. Sixty have had bilateral pneumothorax.

At present 60% of the patients with pulmonary disease in the Sanatorium are having pneumothorax, and altogether 72% have some form of collapse therapy, that is, pneumothorax, oleothorax, phrenicectomy, thoracoplasty, or some combination of these measures. Experience has taught us that even minimal or moderate lesions do ultimately better if collapsed. A small apical lesion tends to become chronic and later to cavitate, but this may be avoided by pneumothorax in the early stages of disease. The smaller and more recent the lesion, the shorter the duration of pneumothorax required, and the less likelihood of complications. In some acute and small lesions, even a year of pneumothorax is sufficient. When cavities are present and disease advanced it may be necessary to maintain the collapse indefinitely, and usually for three or more years. There is no set rule, each case must be judged individually. Pleural adhesions are the great bug-bear to a successful pneumothorax, and alter greatly its effectiveness and consequently its duration also. The indications for beginning pneumothorax are much more clearly defined than those for stopping it.

Pneumothorax, by the timely collapse of lung cavities and consequent disappearance of expectoration, has greatly reduced the incidence of tuberculous enteritis and laryngitis which are direct complications of pulmonary tuberculosis.

To go into details would be impossible in an article of this length. Indications, technique, and management of the pneumothorax case require a good deal of experience. I want to leave the impression, however, that pneumothorax is of the

utmost importance in the treatment of pulmonary tuberculosis. And a patient who has missed consideration of collapse at the time when collapse was possible is in the same class as a patient who has not been considered for operation for cancer when operation was possible.

During recent years the introduction of oil into the pleural cavity (oleothorax) has been used to increase the effectiveness of pneumothorax. The oil is absorbed very slowly, exerts a more constant pressure so adhesions interfering with the collapse may be stretched. Occasionally in spite of repeated refills of air the lung will gradually expand and become adherent to the chest wall. An intervening layer of oil will often prevent this. Olive oil or paraffin oil are used. The latter in our experience is more liable to cause a pleural reaction so we prefer olive oil. Gomenol is an antiseptic oil and with olive oil as a base is used in the treatment of tuberculous empyema.

**DIVISION OF PLEURAL ADHESIONS (PNEUMOLYSIS).** After a pneumothorax has been induced the collapse of a cavity may be prevented by adhesions between the lung and the chest wall. These adhesions, if not too extensive, can be cut. The "open" method requires the resection of a portion of a rib which will bring the adhesion into direct view. It is then divided as close to the chest wall as possible to avoid opening into the lung which would infect the pleural cavity. The "closed" method, by thoroscopy and cautery, is now more generally used. The operation is comparatively a minor one and in skilled hands equally successful, and bleeding and complications are infrequent.

**PHRENICECTOMY.** The diaphragm is a muscular partition between the thoracic and abdominal cavities, and as an important muscle of respiration is in constant motion. If it were paralyzed and so ceased its motion, lost its muscle tone, and consequently became elevated in a more or less fixed position, the beneficial effect on a diseased lung would be obvious. The phrenic nerves supplying the two halves of the diaphragm arise from the 3rd, 4th and 5th segments of the cervical portion of the spinal cord. Fortunately this nerve is accessible in the neck. Its course varies, but usually it can be found as it crosses the scalenus anterior muscle. By crushing or cutting (phrenicotomy) there is a temporary paralysis of half of the diaphragm for six to ten months. By removing the nerve (phrenicectomy), or as much of it as possible, a permanent paralysis results unless accessory fibres resume the function of the phrenic nerve.

Pneumothorax is still for many reasons the first choice, but when it is not possible crushing or evulsion of the phrenic nerve should always be considered. Results are better with basal lesions because the base of the lung is nearest the diaphragm. General rest and release of tension within the lung occurs so that even apical lesions can be improved. Cavities will close also unless too thick-walled or too firmly adherent to the

chest wall by tough fibrous tissue. During the last five years at Ninette 175 patients have had phrenicectomy, and some very remarkable results can be shown. As experience has increased and the initial wave of enthusiasm subsided a much wiser judgement has developed and the limitations, indications and contraindications more clearly understood. It may be concluded though, that it is a very useful addition to our armamentarium for treating tuberculosis. The whole subject of phrenic nerve surgery is extensive and interesting but cannot be further elaborated in a brief paper.

**EXTRA-PLEURAL THORACOPLASTY** may be necessary to close lung cavities. Portions of the ribs are removed in one, two, three or more stages, according to the extent and type of the lesion and the condition of the patient. By the falling in of the chest wall the diseased lung contracts toward the mediastinum. This major procedure is done only when collapse by pneumothorax is not possible. There must be some evidence of natural ability to heal, such as fibrosis and retraction. The contralateral lung must be relatively free of disease, at least involvement must not be extensive and lesions healed or stationary. Phrenicectomy is usually done as a preliminary measure. As with pneumothorax, thoracoplasty is being applied earlier and earlier and to smaller and less advanced lesions as knowledge increases, and results are naturally becoming more favorable. During 1933 over 25 thoracoplasties were performed on patients from the Sanatorium at Ninette. A combination of the above procedure is possible, such as pneumothorax and phrenicotomy on the same, or either side, or thoracoplasty and pneumothorax simultaneously or on either side.

**APICOLYSIS** is the introduction of wax or muscle between the upper ribs and the parietal pleura thus affecting a collapse of an underlying lung cavity. This procedure has a limited field of usefulness, has sometimes troublesome complications so usually apical thoracoplasty is preferable.

During the past year 80 percent of the patients admitted to the sanatorium had cavitation in their lungs. Records in the literature of several series show that 80 percent with uncollapsed tuberculous cavities die within five years. Therefore the treatment of advanced pulmonary tuberculosis practically resolves itself into the treatment of cavities. A person with a cavity may live a long, useful and happy life, but the chances are greatly against this. A cavity means the advent of secondary organism and a persistent cavity invariably means persistent sputum, containing tubercle bacilli. He is, then, a spreader of infection and disease and a real public menace. He is not only a danger to others but a potential danger to himself. Hemorrhages may cause extension of disease and constant positive sputum may infect healthy lung tissue. Therefore, a great step in the prevention and cure of tuberculosis is the prevention, or closure, of cavities.

\* First published in the University of Manitoba Medical Journal.



## CASE REPORTS

## Two Breast Tumours

C. E. CORRIGAN, F.R.C.S. (Eng.)

1. **Mrs. M. Age 32 years. Housewife. Two children aged 9 and 10 years.**

*History.*

Complained of a lump in the right breast which she discovered accidentally during an attack of influenza in January, 1934. It was not painful until two weeks ago, nor has it increased in size since first noticed. Lately, there has been pain in the region of the breast generally, particularly noticeable on movement of the right arm. No relation of pain to periods.

*Examination.*

On examination, the patient is rather thin and pale, and she gives a long history of having been treated for anaemia and nervous spells. Inspection reveals some slight asymmetry of the breasts, the right projecting forwards more than the left. There is no alteration in the level or projection of the nipple. The whole breast is occupied with a mass of elastic nodular tissue but in the upper and inner quadrant is a more localized lump, which is tender on manipulation. In this respect only does it differ from the rest of the breast tissue. All nodules are firm and are attached to the breast tissue surrounding them but not to the skin, nipple or deeper structures. None are discrete. There is no discharge from the nipple and the skin is normal. There are a few palpable lymph glands on the medial wall of the axilla. They are slightly enlarged and tender but are not fixed. No other lymph glands are involved. The left breast is normal. No enlargement of the liver or abdomen. No chest symptoms. Pelvic examination shows no evidence of metastatic growth.

*Provisional Diagnosis* Chronic Intestinal Mastitis or Carcinoma of the Breast.

**Operation**—February 28th, 1934.

An incision was made radially over the lump in the upper and inner quadrant. It was removed with difficulty, being intimately attached to the surrounding tissue. It was seen to consist of a solid greyish mass of unencapsulated tissue. Cutting into it with a knife, it gave a gritty sensation and the cut surface retracted in saucer-shaped fashion. The cut surface was streaked with thin white lines. Scraping with the knife edge, gave the impression of a finely granulated surface. A radical amputation was performed after the method of Sampson Handley.

*Microscopic Report.*

“Chronic interstitial mastitis with well established spheroidal cell carcinoma. The axillary nodes are literally stuffed with neoplastic cells.”

*Diagnosis*—Carcinoma of the Breast.

*Progress.*

Convalescence was normal and the patient was started on a course of deep x-ray therapy on March 19th, 1934.

*Comment.*

The first impression one had of the patient was that of a neurotic hysterical female.

The physical signs in the breast were more suggestive of chronic interstitial mastitis than of carcinoma.

She was only 32 years of age, yet she had extensive regional metastases.

Her appetite, which had been poor for some months, returned with vigour after the operation. The precise cause of anorexia in malignant disease is unknown, but in the absence of sepsis, one is tempted to surmise that the active agent originates in the neoplastic cells or their immediate surroundings.

This case is illustrative of the axiom that every breast tumor should be regarded with suspicion until either biopsy or the clinical course proves it to be innocent.

‡ ‡ ‡ ‡

2. **Miss B. Age 20 years. Maid.**

*History.*

First reported, February 2nd, 1934, complaining of a painful lump in the left breast. This had been noticed ten days previously. The pain was dull but there were exacerbations.

The only important point in the previous history was an attack of pelvic peritonitis, twelve months previously. The patient had been treated in hospital for four months for this condition.

*Examination.*

General physical examination revealed no important abnormality. Weight was six pounds less than when discharged from hospital, but seven pounds more than what it had been before the attack of pelvic peritonitis.

The right breast was normal.

**Left Breast.**

**INSPECTION**—The left breast was larger than the right. There was no retraction of the nipple and no discharge.

**PALPATION**—A mass was palpable in the upper and outer quadrant, about 1½ inches in width and three inches long. It was not easily palpable with the flat hand, but could be easily defined when grasped between the fingers and thumb. The mass was pyriform in outline, and firm in consistency. It was attached to the remainder of the breast tissue but not attached to the muscles or the overlying skin. It was freely movable.

**Left Axilla.**

A small gland was palpable at the axillary

border of the pectoralis major and two glands at the upper end of the inner wall of the axilla. These glands were tender. Two small glands, not well defined, were found in the sub-clavicular fossa and also on palpation a suggestion of enlarged glands in the left supra-clavicular fossa.

There were no palpable glands in the neck, right axilla, or the groins.

#### *Provisional Diagnosis.*

The findings in this case were consistent with the presence of an early carcinoma of the breast. However, with the short history and the complaint of pain in the region of the mass, it was considered justifiable to keep the case under observation for a few weeks with a tentative diagnosis of chronic interstitial mastitis.

#### *Progress Notes.*

1. The patient reported back in two weeks and on examination no change was noted in the condition of the mass. As the patient now had a chest "cold" an exploratory incision was ruled out for the time being.

2. In three weeks the patient reported back again. No change was noted in the mass. The patient was put on small daily doses of pot. iodide and told to report back again in two weeks.

3. Three weeks later the patient reported again for examination. She complained that the pain was still present in the left breast, and, in addition, there was now pain in the right breast. Examination showed no change in the mass in the left breast but there was now a similar but smaller lump in the right breast.

#### *Diagnosis.*

The finding of the lump in the right breast and the clinical course of the case justified the diagnosis of chronic interstitial mastitis. But the patient was instructed to report back in three weeks.

#### *Comment.*

Clinical observation confirmed the original diagnosis of chronic mastitis, but if the case had continued to give grounds for suspicion of malignancy, operative treatment would have been carried out. In all such cases where operative treatment is undertaken the surgeon should be prepared to do the radical operation and be guided in his final decision by the examination of the tumour in the operating room, re-enforced with the report of a pathologist on a frozen section.

## OBITUARY

Dr. Harriet Foxton Clarke, the first woman to graduate from the school of medicine of the University of Manitoba, died recently at Billings, Montana, aged 71.

Dr. Clarke was born in Brockville, Ontario, on February 17, 1862. She attended the Toronto Medical school for two years, and then came to Winnipeg to complete her training, taking her degree in 1892. She was married to Dr. Andrew Clarke at Detroit, Michigan, December 27, 1894, and practised medicine in that city before going to Billings.

Dr. Clarke specialized in obstetrics and was very highly esteemed by the people of Billings and the ranchers for many miles around. She was well known in Winnipeg.

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# Medical Library University of Manitoba

A summary of the contents of some of the journals available for practitioners, submitted by the Faculty of Medicine of the University of Manitoba. Compiled by T. E. HOLLAND, B.Sc., M.D. (Man.), F.R.C.S. (Edin.).

## THE LANCET—January 13th, 1934.

“Cancer of the Colon.” Its Surgical Treatment—by D. P. D. Wilkie, M.D., F.R.C.S., Professor of Surgery, University of Edinburgh.

—Professor Wilkie discusses the diagnosis, operative treatment and results in carcinoma of the Colon. The article is well illustrated.

“Treatment of Arthritis and Rheumatism with Gold”—by Gerald Slot, M.D., M.R.C.P. (Lond.) D.P.H.

—Two types of cases were treated: (1) Acute and sub-acute rheumatism in which results were poor and (2) Rheumatoid arthritis in which the results were superior to those of other methods and considered to be a distinct advance in treatment of this condition.

## THE CANADIAN MEDICAL JOURNAL

January, 1934.

“Some Pitfalls in the Diagnosis of Conditions giving Rise to Chronic Abdominal Discomfort”—by J. S. McEachern, M.D., F.R.C.S. (C.), Calgary.

“A New Pupillary Test in Pregnancy”—An abstract from an article in the American Journal Of Obstetrics and Gynaecology, June, 1933—by S. Bercovitz.

—A test in which five or six drops of the patient's blood diluted with a drop of normal saline and placed in the conjunctival sac produces dilatation or contraction of the pupil if the patient be pregnant.

“The Evolution of Cancer from Benign Cystic and Papillomatous Lesions of the Breast”—by E. M. Eberts, Montreal.

“The Radium Treatment of Primary Carcinoma of the Breast”—by Geoffrey Keynes, M.D., F.R.C.S., Asst. Surg. St. Bartholomew's Hospital, London.

—This article gives full details and results of the author's method of treatment.

“The Etiology and Medical Treatment of Diseases of the Extra-Hepatic Biliary Tract”—by Charles Hunter, M.D., Winnipeg.

“The Early Diagnosis of Cancer of the Tongue and Lip”—by W. Alan Curry, M.D., F.R.C.S., Halifax.

“Blood Pressure, Normal and Abnormal”—by J. M. Livingston, Waterloo, Ont.

## ARCHIVES OF INTERNAL MEDICINE

January, 1934.

“Myasthenia Gravis”—by Walter M. Boothby, M.D., Rochester, Minn.

—The effect of treatment with glycine, and ephedrine. A report on 12 cases treated with ephedrine and glycine, ten of whom showed definite improvement.

## THE NEW ENGLAND JOURNAL OF MEDICINE

February 8th, 1934.

“The Diagnosis, Treatment and Immediate Prognosis of Cerebral Trauma”—by Donald Munro, M.D. From the Neurosurgical Service, Boston City Hospital.

—An introductory Study of 1494 cases. A description of the author's method of treatment consisting of preliminary treatment of surgical shock when present, therapeutic dehydration and repeated lumbar puncture for decompression. He emphasizes the danger of morphine in these cases, depressing an already embarrassed respiratory centre and points out the fallacy of the old idea that increased intracranial pressure tends to decrease intracranial haemorrhage.

## CANADIAN MEDICAL ASSOCIATION JOURNAL

February, 1934.

This issue contains a number of noteworthy articles, among which are the following:—

“Surgical Therapy in Gall Bladder Disease”—by Roscoe R. Graham, M.B., Toronto.

—A good article with illustrations of method of dealing with the common bile duct.

“Remarks on Intestinal Parasites in Montreal and the Relation of Entamoeba Histolytica to Colitis”—by Anne Porter, D.Sc. (Lond.), F.R.S.S. (Af.), Honorary Research Associate, McGill University.

“Entamoeba Histolytica and Colitis in Montreal”—by R. H. M. Hardisty, M.D., Montreal.

—Clinical notes supplementing laboratory details supplied by Dr. Porter.

“A Clinical Review of Two Hundred and Forty-one Cases of Obstruction of the Small Bowel”—by E. Walter Workman and G. Garen Miller, Montreal. From the Department of Surgery, McGill University, and Royal Victoria Hospital, Montreal.

“The Clinical Aspects of the Histology and Pathology of the Pancreas”—by George K. Wharton, London, Ont.

“Genito-Urinary Tuberculosis”—by David W. McKenzie, Montreal.

“The Relief of Pain in Labour with Nembutal”—by Fred. G. McGuinness, Winnipeg.

—A discussion of the results obtained as presented to the Annual Meeting of the Manitoba Medical Association, September 9th, 1932.

“On Some Aspects of Psoriasis”—by J. F. Burgess, M.D., Montreal.

## BRITISH MEDICAL JOURNAL

February 10th, 1934.

“Spontaneous Hypoglycaemia with Hepatitis”—by Henry Moore, M.D., F.R.C.P. (I), et al., Dublin.

“Ultimate History of a Case of Acute Spontaneous Hypoglycaemia”—by Henry Moore, M.D., F.R.C.P. (I), Dublin.

“Diabetes Mellitus with Degeneration of the Supra-renal Glands”—by R. Brookfield, M.D., M.R.C.P., and H. V. Corbett, M.B., Liverpool.

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**MAY 14th**

The Fiftieth Anniversary of the Manitoba Medical Association will be celebrated May 14th to 19th with a clinical week. The years of medical teaching in Manitoba, but graduate courses to be provided by the Faculty of Medicine each year. The clinical program of practical nature, and is planned so as to be of general practice.

This course is intended for all medical students to attend. Although this year the Jubilee of the Association is celebrated in conjunction with the clinical week, all are cordially invited. All Canadian Universities, who will contribute to the programme. Lectures given on subjects of practical every-day importance will be a series of practical demonstrations to demonstrate the technique and difficulties of various groups will be particularly valuable, as the details of small details of procedures which are so important in medicine. The plans for these small group post graduate course being described by one of the speakers with side shows."

On May 14th there will be a public reception at the New Winnipeg Auditorium, with an address "Fifty Years," by Dr. D. A. Stewart. Guest speaker meeting on May 15th, and Professor William Osler Memorial Lecture on the evening of May 18th will be held on May 16th.

In addition to informal social engagements, a reception will be held on May 16th at the Fort Garry Hotel, where an address will be given.

It is confidently expected that every week will not only benefit from a practical program, but a unique opportunity of renewing old friendships with former teachers.



# ds of Graduates Are—

to Attend the  
N JUBILEE

of the

Manitoba Medical  
COLLEGE

Post Graduate

Course

4th to 19th

The Manitoba Medical College will be observed  
week. The occasion will not only celebrate fifty  
years, but will also inaugurate a series of post-  
graduate courses. The Faculty of Medicine of the University of  
Manitoba has provided a programme of a thoroughly  
practical post-graduate course, which will be of value particularly to doctors in

the western medical men west of the Great Lakes who wish  
to attend the Manitoba Medical College is being  
celebrated in clinical week, graduates of all medical schools  
in the West are being asked to send representatives to  
participate in the programme. A series of clinical lectures will be  
given of great importance. In addition, each day there  
will be demonstrations to small groups of twelve doctors, to  
discuss the various clinical procedures. These small  
group demonstrations will be able to discuss the  
importance of the day to day practice of  
medicine. All group demonstrations have resulted in this  
by one medical man as a "three ring circus"

A public reception and ceremonial meeting at the  
University will be held on "The Progress of Medicine in Fifty  
Years" and the best speakers will address a special scientific  
meeting. Dr. William Boyd will deliver the Gordon Bell  
Lecture on May 18th. The Convocation of the University

will include engagements, an alumni dinner and dance will  
be held at the Murray Hotel. At each luncheon a short clinical

will be given to every medical man who attends this clinical  
practical post-graduate course, but will also enjoy  
old friendships among his contemporaries and

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# Clinical Week Programme

## Monday, May 14th

The following is the tentative programme:

- 9.00-12.00 Registration—Manitoba Medical College.  
 11.00-12.00 Moving Picture — "Infections of the Hand."  
 12.30- 2.00 Lunch—Clinical Address.  
 2.30- 5.00 Fractures—Dr. H. P. H. Galloway, Chairman.  
 (1) Immediate Care of Fractures and Transport of Patient.  
 (2) Methods of Applying Traction.  
 (3) Fractures of the Elbow in Children.  
 (4) Fracture of the Neck of the Femur.  
 (5) The Value of Non-Padded Plaster Casts.  
 (6) Reduction of Fractures Under Local Anæsthesia.  
 (7) Some End Results of Fractures—Good and Bad.  
 Evening Ceremonial Meeting and Reception—Winnipeg Auditorium. Address: Progress of Medicine in Fifty Years—D. A. Stewart, LL.D., F.R.C.P.(C.).

## Tuesday, May 15th

- 9.00-11.00 Clinical Pathological Conference — Prof. C. R. Gilmour and Prof. Wm. Boyd.  
 11.00-12.15 Small Group Clinical Demonstrations and Discussions.  
 12.30- 2.00 Lunch—Clinical Address: Prof. R. L. McGibbon, Saskatoon: "Flights from Medicine."  
 2.30- 5.00 Surgical Emergencies—Prof. B. J. Brandson, Chairman.  
 (1) Treatment of Head Injuries.  
 (2) Diagnosis and Treatment of Abdominal Injuries.  
 (3) Emergencies of Upper Abdomen.  
 (4) Late Appendicitis.  
 8.30 Scientific Meeting—Guest Speakers:  
 Dr. A. A. Fletcher, Toronto.  
 Dr. N. M. Keith, Rochester, Minn.: Management of Ascites.

## Wednesday, May 16th

- Morning University of Manitoba Convocation — Winnipeg Auditorium.  
 Afternoon Clinical Lectures—Medicine and Surgery:  
 Dr. N. M. Keith, Rochester, Minn.: Essential Hypertension.  
 Professor Wangenstein, University of Minnesota.  
 Evening Alumni Dinner and Dance.

## Thursday, May 17th

- 9.00-11.00 Tumour Clinic—Prof. Wm. Boyd, Chairman.  
 (1) Grading of Malignancy; Its Bearing on Treatment.  
 (2) Lip and Oral Cancer.  
 (3) Cancer of Breast.  
 (4) Enlarged Lymph Glands of the Neck.  
 11.00-12.15 Small Group Clinical Demonstrations and Discussions.  
 12.30- 2.00 Lunch—Clinical Address.  
 2.30- 5.00 Functional Disorders of the Nervous System—Chas. Hunter, F.R.C.P. (Lond.) Chairman.  
 (1) Manifestations.  
 (2) Aetiology.  
 (3) Management.

MEETINGS WILL BE HELD IN THE MEDICAL COLLEGE, UNLESS OTHERWISE SPECIFIED.

Any alterations in this list will be announced later.

## Friday, May 18th

- 9.00-11.00 Obstetrics and Gynæcology—Prof. D. S. MacKay, Chairman.  
 (1) Obstructed Labour — O. Bjornson, Professor Emeritus in Obstetrics.  
 (2) Toxæmias of Pregnancy — Ross B. Mitchell, F.R.C.P.(C.).  
 (3) Cancer of the Cervix — J. D. McQueen, F.R.C.S.(C.).  
 11.00-12.15 Small Group Clinical Demonstrations and Discussions.  
 12.30- 2.00 Lunch—Clinical Address.  
 2.30- 5.00 Medical Symposium:  
 (1) A Short Review of Digitalis Therapy and the use of Modern Diuretics—Prof. C. R. Gilmour.  
 (2) The Modern Treatment of Anæmias—L. G. Bell, M.R.C.P. (Lon.).  
 (3) Essential Hypertension — J. D. Adamson, M.R.C.P. (Ed.).  
 (4) Common Types of Diarrhoea in Adults; Their Significance, Diagnosis and Treatment—Dr. H. D. Kitchen.  
 (Other items to be announced later)  
 Evening Gordon Bell Memorial Lecture — Prof. Wm. Boyd, under auspices of the Winnipeg Medical Society.

## Saturday, May 19th

- 9.00-11.00 Diseases of Children — Gordon Chown, F.R.C.P.(C.), and Dr. J. D. McEachern, Chairmen.  
 (1) The Acute Abdomen in Children.  
 (2) Pyuria in Childhood.  
 (3) Some Aspects of Tuberculosis in Childhood.  
 (4) The Acute Ear in Childhood.  
 (Saturday Afternoon — Golf, etc.)

## Small Group Clinics and Demonstrations

- Heart—John M. McEachern, F.R.C.P.(C.).  
 Varicose Veins and Ulcers—C. E. Corrigan, F.R.C.S. (Eng.), and Dr. Ross Cooper.  
 Clinical Laboratory Methods—Daniel Nicholson, M.R.C.P. (Lond.).  
 Diabetes—A. Hollenberg.  
 Infant Feeding—Gordon Chown, F.R.C.P.(C.).  
 Nephritis—Prof. Wm. Boyd. L. G. Bell, M.R.C.P. (Lond.).  
 Rectal Surgery—P. H. T. Thorlakson, F.R.C.S.(C.).  
 Dermatology—A. M. Davidson.  
 Goitre—Gordon Fahrni, F.R.C.S.(C.).  
 Obstetrics: Pre and Post-Natal Care—Blake Watson, M.C.O.G.  
 Mechanism of Labour—A. Blondal.  
 Face and Brow Presentations — W. G. Campbell.  
 Use and Abuse of Forceps — F. G. McGuinness, F.R.C.S.(C.).  
 Hæmorrhages of Pregnancy — C. L. Arthur, F.R.C.S.(C.).  
 Methods of Induction—A. S. Kobrinsky.  
 Gynæcology: Radium and the Cautery in Cancer of the Cervix—J. D. McQueen, F.R.C.S.(C.).  
 Irregular Bleeding at the Menopause—Prof. D. S. MacKay.  
 The Friedman Pregnancy Test — Blake Watson, M.C.O.G.  
 Diagnosis and Treatment of Common Cervical Conditions—C. R. Rice.  
 Trichomonas Vaginalis — C. W. MacCharles.  
 Chest—D. L. Scott. M. B. Perrin, F.R.C.S. (Ed.).  
 Eye—Prof. T. Herbert Bell.



## Editorial and Special Articles

### The Manitoba Medical Association Review

*Formerly the Bulletin of the Manitoba Medical Association*

ESTABLISHED 1921

WINNIPEG, APRIL, 1934

*Published Monthly by the*  
MANITOBA MEDICAL ASSOCIATION

*Editorial Office:*  
101 MEDICAL ARTS BUILDING, WINNIPEG

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*Editorial or other opinion expressed in this Review is not necessarily  
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### Clinical Section

For several issues, the *Manitoba Medical Association Review* has been publishing a series of articles on clinical subjects. The intention has been to confine these to the discussion of diagnosis and treatment of various clinical conditions which are common in day to day practice. As these articles are short, it is necessary to confine them to subjects which are not contraversial, and to make them somewhat didactic in tone. It is hoped that this series of short articles may prove to be of practical value to all practitioners. Arrangements have been made with the Faculty of Medicine of the University of Manitoba to contribute most of these papers. The series is continued in this issue with an article on "Acute Intussusception in Children," by Dr. J. D. McEachern.

C. W. MACC.

### Medical Services for Relief Cases in Winnipeg

As noted in the last number of the *Review*, the plan for the medical care of citizens in receipt of Government relief funds was arranged by the City of Winnipeg, and went into operation February 21st. This plan appears to be working satisfactorily, and several of the other municipalities of Greater Winnipeg have adopted a similar plan. The following note has been received from Dr. A. J. Swan, Secretary of the Special Relief Committee of the Winnipeg Medical Society and the Manitoba Medical Association:

The following Suburban Municipalities are now operating under the same plan of medical relief as the City of Winnipeg:

EAST KILDONAN—Administrator: Mr. J. W. Battershill, 206 Chambers of Commerce, 160 Princess Street, Winnipeg

WEST KILDONAN—Administrator: Dr. E. W. Stewart, 802 McArthur Bldg., Winnipeg.

ST. JAMES—Administrator: Dr. I. M. Cleghorn, 200 Berry Street, St. James, Man.

ST. VITAL—Administrator: Dr. I. M. Cleghorn, Fire Hall, St. Vital, Man.

NORTH KILDONAN—Administrator: Dr. C. W. Duncan, 200 Kelvin Street, Winnipeg.

You are again reminded that all accounts must be in the hands of the City Relief Officer by the 5th day of the following month, and must be in duplicate, other reports being rendered in single form.

It is essential that accounts be itemized and totalled, and, further, that the name and address of the doctor be plainly designated.

It was requested by the City Relief Officer that bills be not rendered in the middle of the month as this leads to confusion, but be held until the end of the month and be rendered between the 1st and the 5th of the following month. Accounts for each month must include all work done during that month, even if in some cases the patient remains under the doctor's care into the following month, except, of course, in the case of operations and confinements, because a set fee has been established for these cases.

A supply of report forms will always be on hand at Room 101, Medical Arts Building.

Careful attention to details will minimize the work at the office of the department.

Negotiations are proceeding with other municipalities of Greater Winnipeg, and the rural municipalities still remain to be considered.

### What Has Organized Medicine Done for the Profession of Manitoba?

**Extra Mural Work.** Since 1929, fifty-three speakers have visited every part of the province, under the auspices of the Manitoba Medical Association and the Canadian Medical Association, bringing the latest in medicine to the rural practitioners. This work could not have been accomplished had there been no organized medicine in Manitoba.

**Municipal Doctors.** In 1931-2, through the efforts of organized medicine, certain amendments were made to the Municipal Act, clarifying the appointment, etc., of municipal doctors. It is now impossible for the supplying of medical services in this manner to become a racket, whereby the medical man giving his services is exploited.

**Medical Relief.** In 1932, a medical relief committee was appointed, consisting of members of the Winnipeg Medical Society and the Manitoba Medical Association. Through the activities of this committee, and with the support of organized medicine, certain very definite arrangements have been made with municipal and provincial authorities with reference to payment for medical services to those in receipt of relief. It is not necessary to mention to any medical man in Manitoba the far-reaching results of the work accomplished by this committee, and for this one reason alone it should be imperative that every man who

makes his livelihood by the practice of medicine should give organized medicine his whole-hearted financial and moral support.

**Indigents.** The Manitoba Medical Association has also been successful in arranging payment for medical services to families placed back on the land under the Rural Rehabilitation scheme; also for medical work required by wards of the Department of Health and Public Welfare, viz., inmates of our mental institutions and neglected children who have been made wards of the director of

child welfare, as well as the indigent families living in unorganized territory.

**Manitoba Medical Association Review.** The "Review," which is also a result of the activities of organized medicine, does not require any comment. Its value should be apparent to everyone.

**Clinical Meetings.** One does not need to mention the fact that there would not be any annual meeting of medical men in Manitoba, or any monthly meetings in the City of Winnipeg or other district medical societies, if it were

not for organized medicine, and the 1930 meeting of the British Medical Association in Manitoba would not have taken place.

**Join the Organized Medical Societies.**

—F. W. J.

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## Department of Health and Public Welfare

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### NEWS ITEMS

The following is a copy of an article, written by Grant Fleming, M.D., D.P.H., and published in the *McGill Medical Undergraduate Journal*, which the Department feel should be of interest to our readers:

#### Public Health as a Career

GRANT FLEMING, M.D., D.P.H.

The undergraduate medical student approaches the study of medicine with the idea that his years of training are a preparation for the care of the sick. He views his courses as providing him with the knowledge required to enable him to diagnose and treat disease. Medical schools have the same point of view; they plan undergraduate instruction to develop the general practitioner of medicine.

The medical schools do not attempt to graduate men qualified in the special fields of medicine, and so the medical graduate is not supposed to be qualified, upon graduation, as a public health worker.

In recent years, more attention has been given to the teaching of preventive medicine because there has been an appreciation that the practitioner of medicine has not only opportunities but obligations to practise preventive medicine as part and parcel of general medical practice.

There is no doubt that there is a general lack of interest on the part of the medical students in public health. There is some appreciation of preventive medicine as related to private practice, but very little understanding of the organized part of preventive medicine, which is public health.

This is evidenced by the fact that very few undergraduates are sufficiently attracted to public health to plan their future career in medicine as public health workers. There are, of course, exceptions, and these are not as rare as they used to be. Various explanations may be offered for the failure of public health to attract. One which stands out, from the point of view of the teacher of public health, is that instruction which is given chiefly by lecture is not nearly as interesting or as attractive as is clinical instruction. A didactic lecture can never catch the imagination of the student to the same degree as can a difficult diagnosis or the dramatic effects of therapy.

Until recently, the public health services recruited their medical personnel chiefly from among those who had tried general practice and found it distasteful, or from those who had assumed some part-time duties for a department of health, to earn money, and who found their real medical interest to lie in public health. It is not to be assumed, however, that public health services have been staffed by failures in general practice. Doctor Charles J. Hastings, who was

the most outstanding success in Canada as a medical officer of health, had been a particularly able general practitioner for many years. The public health services, in the past, have also recruited from the laboratory. The former Deputy Minister of National Health for Canada, Doctor John A. Amyot, was first associated with public health work as a bacteriologist.

Up to a comparatively short time ago, the public health field was limited in scope and extent. To the medical graduate, it offered an opportunity for administrative and public health laboratory work. On this continent, the last fifteen or twenty years have witnessed a great development in both the scope and the extent of public health services, with the result that there are a greater variety and a greater number of opportunities in the field of public health for the medical graduate.

There are the administrative positions and the laboratory work. The laboratory work has become more extensive as serology, preparation of vaccines, tissue diagnosis and blood chemistry have been added. Communicable disease control now requires that the public health staffs include diagnosticians, epidemiologists, superintendents and clinicians for communicable disease hospitals, together with qualified men to take charge of tuberculosis and venereal disease clinics. Child welfare conferences have passed from the milk depot stage to become centres for regular medical supervision, not only for the infant but for the pre-school child as well. In these and in the school health service, there is an opportunity for the medical practitioner with a special interest in children. The extension of public health into industrial hygiene and mental hygiene has created a demand for medical personnel with special training in these branches of medicine from a preventive point of view. An important place in public health is held by the research worker. Although public health is essentially a service which applies existing knowledge of disease prevention and health promotion, every health department carries on research in either the field or the laboratory. Many of the outstanding advances in medicine have come from the research work done by health departments.

To be successful, the public health physician requires, first of all, tact. It is impossible to succeed in a field which demands public and professional support without a capacity for dealing harmoniously with individuals and groups. It might appear that special training should come first, but no amount of training will overcome the personality handicap. It is not suggested that a good personality is alone sufficient; what is essential is that the man or woman who has a personality that is suited to public health work should secure the special training needed, and he or she may then reasonably expect to succeed in public health work.

In Canada, the only legal requirement for appointment to the position of medical officer of health, or whatever title is given to the position, is that the appointee be a qualified medical practitioner. This is not generally the case in the United States. In Canada, furthermore, the medical officer of health, once appointed, is assured of his tenure of office unless he fails in the discharge of his duties.

Although the law does not require a diploma in public health as a condition of appointment, in practice very few medical appointments are now made to any public health position unless the applicant possesses this additional qualification. This simply means that anyone who seriously contemplates public health as a career and who fails to secure the diploma which is evidence of special post-graduate training in public health, handicaps himself for the remainder of his career.

In England, for a number of years past, the diploma in public health has been a requirement for public health appointments, and it would appear that it is just a matter of time until the same is true for this country.

What attraction then does public health offer to the present or future practitioners of medicine? The modern public health movement had its beginnings as part of that general reform movement which sought to minimize the evils arising in the early years of the industrial revolution. Public health has owed its development to the humanitarian spirit which has sought to lift the burden of disease and ill health from the shoulders of the masses. Medicine has been described as a science and an art, but above all else, medicine is a service to mankind. Every practitioner of medicine is a social worker, and those who sense the need for an organized attack on disease and who appreciate that this can be waged only through community effort, will be attracted to public health. The undergraduate medical student who has a social outlook on life is inevitably interested in public health. He may not enter that field of work himself because he may feel that in private practice he can make his best contribution.

The medical student of today is not unmindful of the changes that are going on around him. The social point of view which an increasing number possess accounts for the growing interest, on the part of medical students, in public health as a career.

The student may have seen the hopelessness of dealing with such diseases as tuberculosis by such limited means as simply treating the diagnosed case. If he is alive to the situation, he must see that tuberculosis is a social problem in the solution of which medicine plays a part, and that the part of medicine can be effective only if it is organized and is correlated with other established community services.

There is a changing trend in medical practice. That changes will come about is inevitable. It is

impossible for medicine alone to stand still and retain its individualistic form of practice in a changing social structure. The trend is towards the organization of medicine and the provision of medical services on some organized basis. These changes are bringing into official health departments activities which, a few years ago, were considered as belonging to private practice because they were in the field of curative medicine.

It is now accepted that no sharp line can be drawn between preventive and curative medicine. The early diagnosis and treatment of disease, the correction of physical defects, the treatment of behaviour problems, are all curative in one sense, but they are preventive in another. This means that the sanitation side of public health has, in large part, been transferred to engineering departments, that health departments are no longer directly responsible for water purification, sewage disposal and garbage removal, and that the medical side of public health has become the major activity. In this way, public health attracts the medical man whose interests are essentially clinical, rather than in engineering. It also attracts the medical man who believes in or accepts as inevitable the coming of organized medical services, and who, therefore, wishes to take his place in what appears to be the nucleus of such organization.

Public health is not sought as a career by those who seek or expect a large financial return. There are those who are attracted by the idea of a regular, if smaller income, who prefer the comparative security of a salary to the uncertainty of fees, who see advantages in the relatively regular hours. There are those who are happier working as members of a group, and who dislike the isolation of private practice and the competitive spirit.

At the present time, there are not many openings in public health. The economic depression has brought about a reduction in public health expenditures, and no new work is being undertaken. This, we may hope, is but a passing phase, and that, with the coming of more normal times, public health will continue its development. When this time comes, there will be a steady demand for medical personnel. It appears that the country will be covered by full-time rural health units. At the head of each unit, there must be a qualified medical officer of health, and so this rural public health development will absorb a large number of medical public health workers. That there will be competition goes without saying, and that is one reason why it is advisable to qualify in good time.

In the United States and Canada, there are eight hundred and sixty-two full-time health officers. Nearly all medical public health positions in Canada are in official departments. There are comparatively few openings with voluntary health agencies. The United States Public Health Service is recognized, in that country, not only as providing the public health services for the Fed-



eral Government, but also as being an excellent training centre, with the result that the personnel is frequently taken from that Service by states and municipalities.

It is not suggested that the medical undergraduate should become any less interested in the treatment of disease, but it must not be forgotten that the first duty of medicine is to prevent disease. The medical undergraduate may see his opportunity to fulfil his desire to care for the sick linked with the prevention of disease in a public health setting.

### COMMUNICABLE DISEASES REPORTED

Urban and Rural : Feb. 1934

Occurring in the Municipalities of:

**Measles:** Total 531—Winnipeg 421, St. James 37, St. Vital 32, St. Boniface 24, Fort Garry 5, Woodlands 4, Unorganized Stuartburn 2, Birtle R. 1, Boissevain 1, Kildonan East 1, Ritchot 1, Shoal Lake T. 1, Transcona 1.

**Chickenpox:** Total 163—Winnipeg 109, St. Vital 11, Brandon 8, Unorganized 8, Kildonan West 6, Albert 5, Fort Garry 3, Brandon 3, Kildonan East 2, Transcona 2, Sprague Unorganized 2, Hamiota Town 1, Hamiota Rural 1, Selkirk 1, St. James 1.

**Whooping Cough:** Total 108—Portage la Prairie C. 31, Woodlea 31, Winnipeg 23, Fort Garry 8, Gilbert Plains Town 2, Ste. Rose Rural 2, Beausejour 1, Dauphin Town 1, Gilbert Plains Rural 1, Selkirk 1, St. James 1. Late reported, January: Woodlea 3, Birch River Unorganized 2, Hillsburg Unorganized 1.

**Scarlet Fever:** Total 81—Winnipeg 39, Roland 5, DeSalaberry 4, Montcalm 4, Thompson 4, Franklin 3, Victoria Beach 3, Boissevain 2, Gladstone 2, St. Boniface 2, Killarney 1, Portage la Prairie C. 1, Rhineland 1, Roblin T. 1, Rosser 1, Strathclair 1, St. Andrews 1, St. James 1, St. Vital 1, Transcona 1, Unorganized 2, Hanover 1.

**Influenza:** Total 67 — Brandon 4, Winnipeg 4. Late reported, January: Brandon 52, Grandview R. 2, Boulton 1, Brenda 1, Dufferin 1, Turtle Mountain 1, White-water 1.

**Tuberculosis:** Total 28—Winnipeg 9, Portage la Prairie C. 3, Kildonan West 2, St. Clements 2, Brandon 1, Flin Flon 1, Kildonan N. 1, Lorne 1, Ochre River 1, Rockwood 1, Shell River 1, St. James 1, Unorganized Fisher Branch 1, Stuartburn 1, Chatfield 1, Winnipegosis 1.

**Diphtheria:** Total 26 — Selkirk 11, Winnipeg 8, Brandon 1, Kildonan W. 1, Mossy River 1, Norfolk S. 1, Strathclair 1, Chatfield Unorganized 1. Late reported, January: Rhineland 1.

**Mumps:** Total 19 — Winnipeg 12, Lorne 3, Unorganized 2, Brandon 1, Dauphin T. 1.

**Erysipelas:** Total 6—Winnipeg 3, Brandon 1, Kildonan West 1, St. James 1.

**Puerperal Fever:** Total 4—Late reported: January: Ellice 1, La Broquerie 1, Rhineland 1, St. Clements 1.

**Diphtheria Carriers:** Total 3—Winnipeg 3.

**Cerebrospinal Meningitis:** Total 1—St. Clements 1.

**Smallpox:** Total 1—Archie 1.

**German Measles:** Total 1—St. Boniface 1.

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## Western Canada Medical History

### Medicine Sixty Years Ago

By ROSS MITCHELL

Before me lies a stout note-book with brown leatherette cover showing evidence of much, but careful, handling. With characteristic Scottish thrift the writer, who, strangely enough, gives no evidence of his identity, begins on the inside of the cover and carries on to the last page. The opening inscription is as follows:

VOL. I

Lectures on the Practice of Physic

By T. Grainger Stewart, Esq., M.D.

Winter Session 1877-8

There is a little evident hesitation in the writer's mind as to the spelling of Practice but the second C finally emerges triumphant.

Page one begins: "PART I—Constitutions and Constitutional Dis-

eases, Thursday, Nov. 1." Constitution is defined as: "the general characteristics of the individual which distinguish it from the mass", and the various constitutions are set down as Nervous, Phlegmatic, Sanguine, Bilious, Strumous, Alcoholic, Malarious, Rheumatic and Gouty. In the delineation of the various constitutions there is a nice sense of word values such as one might expect from a master of medicine like Grainger Stewart. The Nervous Constitution is thus depicted: "Figure under the middle size, and spare if tall, Face mobile, features delicate and finely chiselled, bright sparkling eyes. Circulatory System is excitable. Emotions are strongly pronounced. There is a delicacy in the nervous apparatus, perception keen, judgment rapid. This constitution is liable to the following diseases: Asthma, Epilepsy, Insanity, Neuralgia, Paralysis, Spasmodic affections."

Finer still is the description of the Bilious Constitution: "Com-

plexion and hair usually dark, Body well proportioned, not inclined to corpulence. A sluggishness or over-activity of the liver. A want of tone in the bowels producing constipation. The mind well regulated, severe, utilitarian, logical and contemplative. Rather inclined to selfishness and nil admirari. Diseases usually in the liver or bowels. Individuals of this class require extra large purgatives." Only one who had been reared on the Shorter Catechism could have achieved such a definition.

Over five pages with six prescriptions are devoted to gout.

The usual arrangement of the book is that the written notes appear on each right hand page while on the left is neatly pasted a printed slip marked "(Private Proof)" giving a succinct account of the disease in question. Evidently Dr. Grainger Stewart, then in his second year as Professor of Physic in the University of Edinburgh, was preparing a book for students' use and the printed slips would be distributed at the beginning or close of the lecture. Each description of a disease in this Students' Aid follows this definite scheme: Definition, "Consisting in", "Characterized by"—"Caused—Resulting"—Surely he would be a dull student who would fail to profit by such teaching.

At this time Professor Grainger Stewart was forty years of age, and already a notable figure in British medicine. Five years later he succeeded Christison as Physician-in-Ordinary to the Queen for Scotland, in 1894, on the recommendation of Lord Roseberry, he was knighted, and in 1898, when the British Medical Association met in Edinburgh for the third time, he held the office of President. He died on February 3rd, 1900, and his funeral was held from Free St. George's where he had been an elder.

His contributions to medicine lay in elucidating the differential diagnosis of the various forms of nephritis and in his writings on nervous diseases. He approached clinical medicine by the gateway of pathology. Graduating M.D. from Edinburgh at 21, he studied at Berlin, Prague and Vienna under such teachers as Virchow, Schönlein, Traube, Joseph Mayer, Rokitansky, Oppolzer, Skoda, Hebra and Siegmund, and in 1876 was appointed Professor of the Practice of Physic, a chair which had been filled by Cullen, the two Gregorys and Alison. By virtue of this appointment he became one of the Physicians to the Royal Infirmary. Wherever he lectured he attracted very large classes on



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account of his signal ability as a teacher and his marvellous faculty of throwing aside superfluous detail and going straight to the main point. His presence was tall, commanding and dignified.

It is to Dr. John Monteith of Virden that we are indebted for the discovery of this interesting link with the medicine of our grandfathers' day. It had been at one time in the possession of Dr. Edward Rolston Langrell who graduated L. R. C. P., L. R. C. S., Edinburgh, and L.F.P.S., Glasgow in 1904 and practised for a time in Virden until 1915, a year before his death. Whether the young student who took down so zealously the notes of Dr. Grainger Stewart was Dr. Langrell's father or other relative, and how the book came into his hands remain unknown at the present. One cannot help reflecting that even in this comparatively young country there may lie hidden away in attics or cupboards books, documents or instruments which might be of great value if only for their historical interest.

#### **Fifty Years Ago** **February 13, 1884**

Preparations were complete for the inauguration of the newly-completed Winnipeg General hospital building, which was to be officially opened by a charity ball under the auspices of the Women's Aid society, some members of which were Mesdames Aikins, Brydges, Denison, Pinkham, Banatyne, W. N. Kennedy, Leggo, Yynch, C. C. Montgomery, Pitblade and Pentreath. — Winnipeg Free Press.

#### **Twenty-five Years Ago** **February 22, 1909**

Dr. Brett, of Banff, and other doctors were in favor of an all-Canada standard for the practice of medicine — Winnipeg Free Press.

### **News Notes**

The regular monthly meeting of the Winnipeg Medical Society was held in the Medical College on Friday, March 16th. Dr. E. S. Moorhead, Chairman of the Special Relief Committee, discussed present and future problems of the profession of Greater Winnipeg. A paper on "Modern Views of Chronic Arthritis" was presented by Dr. Moore McPetridge.

‡ ‡ ‡

Robert Hunter, M.D. (Man.), M.R.C.P. (Lond.), has returned to Winnipeg from the Old Country. He is starting to practise at 215 Medical Arts Building, practice limited to internal medicine.

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Dr. Douglas Wallace is now practising at 407 Boyd Building, Winnipeg. His practice is limited

to venereal diseases. Dr. Wallace recently completed a post-graduate in Chicago, U.S.A.

### Report from the College of Physicians and Surgeons of Manitoba

On two occasions the College of Physicians and Surgeons of Manitoba have investigated the activities of one Newton J. Elliott, "Chiropractor" in Brandon, Mani-

toba. Not until 1933 was sufficient evidence obtainable to institute prosecution. Two charges were then preferred against the above Newton J. Elliott, (1) under Section Seventy-Eight of the Manitoba Medical Act, i.e., practicing Medicine without a license, and (2) under Section Seventy-Nine of the same Act, i.e., using the

prefix "Dr." before his name.

He appeared before Magistrate Fraser on April 6th, 1933. Court decision was delayed until April 19th, 1933, when the case was dismissed on both charges.

The College then entered an appeal against the Magistrate's decision.

The County Court Judge on November 23rd, 1933, allowed the appeal, and fixed the penalty payable by the accused at Fifty Dollars and Costs.

Thanks of the Medical profession of Manitoba are due to Dr. H. O. McDiarmid, for his untiring work in carrying this case to a successful issue.

The College of Physicians and Surgeons of Manitoba investigated and instituted prosecution against one, Oscar Dethlefsen, who styles himself as a Doctor and "Magnetopathist." It was demonstrated that he possessed no Medical Degree. The Court found him guilty of practicing Medicine contrary to Section Seventy-Eight of the Manitoba Medical Act, and a fine of Fifty Dollars was imposed.

The Council of the College of Physicians and Surgeons of Manitoba would greatly appreciate the assistance of members of the profession, who may be able to furnish positive evidence that any irregular practitioner, against whom successful prosecution has been obtained, is continuing practice.

W. G. CAMPBELL,  
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"As to the kind of extra carbohydrate to be added, whether lactose or maltose, I believe dextrin-maltose to be better in general in cases of fat indigestion (infantile atrophy)."—C. H. Dunn: *The Hygienic and Medical Treatment of Children*, Southworth Co., Troy, New York, 1917, V. 1, p. 418.

In discussing the treatment of decomposition Feer says: "The period of repair may be shortened by giving suitable additional food; the best, probably, being buttermilk to which carefully regulated proportions of dextrin and maltose preparations or malt soup are added."—E. Feer: *Text-Book of Pediatrics*, J. B. Lippincott Co., Phila., 1922, p. 284.

In the treatment of infantile atrophy, Fischer recommends the following: "The carbohydrate should be increased by gradual addition of dextrin-maltose.

"Malt soup or dextrin-maltose (Mead's) should be added in teaspoonful or more doses to each feeding until the point of carbohydrate tolerance is reached."—L. Fischer: *Diseases of Infancy and Childhood*, F. A. Davis Co., Phila., 1925, V. 1, p. 285.

Grulee, discussing treatment of decomposition, observes: "As a rule it is best to start with 2 to 2½ or 3 ounces of albumin milk to the pound weight in 24 hours; the sugar to be added is in the form of a maltose-dextrin mixture. One should never delay too long in adding this."—C. G. Grulee: *Infant Feeding*, W. B. Saunders Co., Phila., 1922, p. 265.

Referring to the hypotrophic infant, Herrman writes: "In mild cases, the addition of dextrin-maltose instead of cane or milk sugar may be sufficient to obtain a gain in weight."—C. Herrman: *The treatment of nutritional disorders in artificially-fed infants*, New York M. J. 114:158-160, August, 1921.

In discussing artificial feeding in atrophy, Hess states: "The carbohydrates are usually added in a slowly fermentable form, such as the maltose and dextrin compounds, which are usually started by the addition of four grams per kilogram (1/15 ounce per pound) and increased until eight grams or more per kilogram (¼ ounce per pound) of body weight are added."—J. H. Hess: *Feeding and the Nutritional Disorders in Infancy and Childhood*, F. A. Davis Co., Phila., 1928, p. 278.

Concerning the treatment of marasmus, Hill says: "When the stools have become smooth and salve-like, carbohydrate, in the form of dextrin-maltose, may be gradually added up to the limit of tolerance."—L. W. Hill: *Practical Infant Feeding*, W. B. Saunders Co., Phila., 1922, p. 281.

"A spasmophilic baby on bottle feeding should receive a limited amount of milk—a pint, or at the most 24 ounces in the 24 hours—to which cereal gruel and some form of sugar is added, preferably one of the malt dextrin preparations; also the early addition of other foods than milk to the baby's

diet."—M. Jampolis: *Infantile spasmophilia*, Interstate M. J. 25:652, Sept., 1918; *abst. Arch. Pediat.* 35:691, Nov. 1918.

With reference to the treatment of diarrhea, Lust writes: "After several days, 2% to 3% of a maltose-dextrin preparation may be added (Dextrin-Maltose). This is preferable to the easily fermentable lactose or cane sugar."—F. Lust: *The Treatment of Children's Diseases*, J. P. Lippincott Co., Phila., 1930, p. 145.

"The treatment of artificially fed children in the first of these groups consists in putting them on a low fat dietary, and giving them carbohydrate in the form of one of the less fermentable sugars—e.g., dextrin-maltose."—L. G. Parsons: *Wasting disorders of early infancy*, *Lancet*, 1:687-694, April 5, 1924.

Pearson and Wyllie in discussing the treatment of milder cases of inanition say: "Regulation of this disturbed organismal balance is obtained by the addition of carbohydrates, while fat and casein are reduced. For this purpose dextrin-maltose and flour are better than the ordinary sugars, since they are more slowly absorbed and have greater efficacy in their powers of controlling the flora in the large intestine."—W. J. Pearson, and W. G. Wyllie: *Recent Advances in Diseases of Children*, P. Blakiston's Son & Co., Phila., 1930, p. 116.

Regarding the treatment of the marantic infant, Raue states: "After the intolerance to sugar has been overcome a carbohydrate, preferably Dextrin-maltose, may be added."—C. S. Raue: *Diseases of Children*, Boericke & Tafel, Phila., 1922, p. 427.

In discussing the treatment of atrophy, Thursfield and Paterson, state: "If the baby continues to improve, the next step in the treatment is to add to the milk one of the less fermentable carbohydrates, such as dextrin-maltose; . . ."—H. Thursfield, and D. Paterson: *Diseases of Children*, William Wood & Co., 1929, p. 105.

"I also find dextrin-maltose an excellent addition to albumin-milk when the first object of that food has been achieved and a gain in weight is desired; in this way I have succeeded in feeding albumin-milk far beyond the period usually advised, with highly gratifying results."—F. L. Wachenheim: *Infant-Feeding; Its Principles and Practice*, Lea & Febiger, Phila., 1915, p. 158.

"Dextrin-maltose has been substituted for lactose not infrequently, when the tolerance for the latter continues low."—J. H. West: *Low fat, high starch evaporated milk feeding for the marasmic baby*, *Arch. Pediat.* 48:189-193, March, 1931.

"Malt sugar is indicated when others fail to produce a sufficient gain, or when malassimilation of fat is evident."—O. H. Wilson: *The role of carbohydrates in infant feeding*, *Southern M. J.* 11:177, March, 1918; *abst. Arch. Pediat.* 35:447, July, 1918.

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